Sophware

Computers in the Department of Philosophy Number 1, 1985 7 29

WHAT THIS IS

Sophware is a newsletter appearing at intervals carefully calculated to defy prediction and containing news, tips, hints, gossip and rumour of interest to the microcomputer users in the Department of Philosophy, and perhaps to others with similar equipment or programs. Those outside the department wishing to receive copies (via campus mail) should send name and address to Prof. R. W. Binkley, Department of Philosophy, Talbot College 324, (679-2149), who is functioning as editor for the time being, or to the Department, Talbot College 315, (679-3451). Those inside can see Maxine.

Contributions from users reporting their discoveries and inventions are most welcome, particularly if in the form of *Perfect Writer* or *WordStar* text files on disks readable on our single-sided Kaypro II machines. (We can read most CP/M formats using our reformatting programs *Uniform* or *MediaMaster*, as well as a few others, including MSDOS, but we are not into modems as yet.) Contributions may be sent to Prof. Binkley, who will attempt to copy and return disks and to exercise other editorial prerogatives. [R.W.B. 1985 7 4]

OUR ENVIRONMENT

Our computer environment, as this sort of thing is sometimes called in computer science circles, is focussed on a narrow range of fairly primitive equipment and programs. At the center is the pre-Kantian 8-bit CP/M operating system running on single-sided double-density Kaypro computers. Printing is done on a Daisywriter daisywheel printer, usually set so as to emulate a Diablo 63Ø, or on an Epson dot-matrix printer, either the FX-8Ø or an RX-8Ø.

Beyond this there is a Visual 5Ø terminal connected to the University's mainframe, and an Olivetti typewriter connected to it via a serial RS-232 interface, and some people use this to dabble in LOGO, LISP, PROLOG and other forms of artificial intelligence, but this is not recognized by *Sophware*, which scorns all counterfeits. No doubt some clever person could integrate the terminal and typewriter into the Kaypro circle, but that has not been done as yet. (Actually, the Olivetti was connected to a Kaypro for a time, but the wire broke, and no one now quite understands how it was done.)

In addition, some department members have alien equipment at home - Apples (or clones), Commodores, Tandys and MSDOS machines, but, of course, they do not bring any of that into the office.

The main work done in this environment is word processing, though other projects are sometimes undertaken. The main

CONTENTS

What this is	p. 1
Our environment	p. 1
Half price disks	p. 3
Dropping the PW menu	p. 3
Keeping PW edit files short	p. 5
Distance units in PF formatting	p. 6
Techtype	p. 6

programs we have, whether we use them or not, are:

Operating systems:

CP/M 2.2. The plain version.

CP/M 2.2G. Plain version adapted for Maxine's 'yellow dot' machine.

CP/M 2.2E. *PluPerfect*'s enhanced version; required for their enhanced version of *Perfect Writer*. This one comes up saying 'Plato'.

ZCPR-new. This is our latest version of the public domain ZCPR, an enhanced version of CP/M 2.2. (It's the one I use.)

ZCPR-CP/M 2.2G. The same, but adapted to the 'yellow dot' machine.

Word Processing:

Perfect Writer, version 1.2Ø. The standard version of our favorite program. This is what I use.

Perfect Writer, *PluPerfect* enhanced version. The enhanced version of *Perfect Writer* put out by *PluPerfect*. Used quite a bit.

Perfect Writer, version 1.Ø3. Our original bug ridden version. Avoid it.

WordStar, version 3.3Ø. This is a standard word processing program, but we do not seem to use it much. One of its virtues is its 'what you see is what you get' approach. There is a utility around for speeding it up by having it skip its sign-on ceremony.

Formatting and printing:

Perfect Formatter and *Perfect Printer*. These are part of the *Perfect Writer* package. *Perfect Formatter* makes use of a configuration file PF.DAT. Generally speaking these, together with the PW.SWP file used by *Perfect Writer* all have to be the same version.

Fancy Font. This is for fancy printing to the Epsons. It allows a variety of fonts and type sizes.

TECHTYPE. A recently arrived program for fancy printing to the Daisywriter. It is designed for technical writing, and is especially good for equations. It also permits italics. This issue of *Sophware* is printed with it.

Proof reading:

Perfect Speller. Came with the *Perfect Writer* package.

The Word Plus. A much superior dictionary program.

Punctuation and Style. From the same company as *The Word Plus*. Checks for various stylistic errors.

Spreadsheets:

Perfect Calc. Compatible, more or less, with *Perfect Writer*. Bruce Freed has done a fair bit with this.

SuperCalc. In the *WordStar* family. Not used.

Profit Plan. Yet another. Easier than the others, perhaps, but not used.

Database programs:

Perfect Filer. Could be used, but isn't.

DataStar. Another *WordStar* relative.

FYI 3ØØØ. A newly arrived text oriented system. It seems better suited to scholarly purposes than the others, and will no doubt be used a lot.

Programming:

MBASIC. The standard microcomputer version of interpreted BASIC.

SBASIC. A rather exotic compiled BASIC. Very powerful, but supplanted for many by TURBO PASCAL.

ASM. This is the standard old-fashioned 8Ø8Ø assembler, but let us not be ridiculous.

Keyboard definition:

Xtrakey. An extremely valuable program. It would be hard to carry on without it.

SmartKey. Does the same sort of thing, but not as well.

Utilities:
(A few of the main ones)

D. Displays the disk directory with file sizes. Indispensable. Much better than DIR.

I. Displays a text file on the screen. Better than TYPE.

WASH+. For copying, deleting, renaming and viewing files.

SWEEP. Like WASH+.

PIP. The standard program for sending files back and forth between disks and other devices.

RPIP. An improved version of PIP.

COPY. For formatting and copying disks.

FASTCOPY. The same, but for the *PluPerfect* enhanced CPM/ 2.2E.

SYSGEN. For putting the operating system on a disk.

UNERA. For recovering an accidentally erased file, if you're lucky.

SuperSort. For sorting files of various kinds. There is also a sort utility, SU, associated with *FYI 3ØØØ*.

BIGFOOT. For including oversize endnotes in *Perfect Writer* files.

It should be added, as another facit of our environment, that computing skill levels in the department cover a wide range, all the way from complete novice to incomplete novice. *Sophware* will attempt to speak to all; its watchword is: *Let the blind lead the blind!* [R.W.B. 1985 7 7]

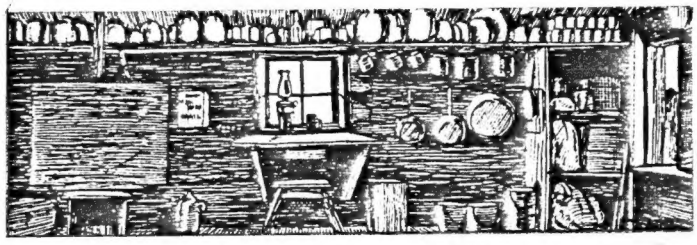
HALF PRICE DISKS

Our Kaypro drives are described as 'single-sided', but that means that you can't use both sides of a disk at the same time; it doesn't mean that you can't use the other side at all. The other side, in fact, has a magnetic coating just like the first side, and is quite usable. All you have to do is punch two holes in the disk covering, located symmetrically to the ones already present, and cut a symmetrically located notch.

It is helpful to make a template out of cardboard and then mark where the holes and notch are to go with lead pencil. The holes can be punched with a ¼ inch paper punch. When punching the hole, protect the disk surface with a little strip of cardboard. The notch can be done with the punch, or with an X-acto knife.

The disk covering has a white fabric inner lining, and this often fails to punch out neatly and you have to trim it away. Some brands, for example *Software City* disks on sale at the computer store near the York and Talbot LCBO, don't have the liner where you want to punch the hole, and so are a bit easier to work with.

I have been doing this for some time, and never have any trouble. Or rather, when I have trouble it is as likely to be on one side of the disk as the other. [R.W.B. 1985 7 9]



DROPPING THE PW MENU

Once you become familiar with *Perfect Writer* you will want to get rid of the Menu. It takes up space on the program disk (22 k) which could be used for other

things, it slows you down and it asks tedious questions. Remove it by erasing the command file MENU.COM from the *Perfect Writer* edit disk. You can use WASH+ for this, or the dinosaur SWEEP, or the built-in CP/M command ERA. And while you're at it, you might as well get rid of the Help file PW.HLP (another 6 k), if it is still there. Naturally, you would only do this to your own personal disk, not to a disk that others might use.

But, it might be asked, how can you run the program without the MENU? As it happens, almost all the things the menu does for you can be done by direct commands to the CP/M prompt, and done more efficiently. You lose the ability to get the directory, and to delete and rename files from within *Perfect Writer*, but these things are better done directly from CP/M anyhow.

Editing:

Suppose your edit disk is in A: and you are logged onto B:, where your text files are. This is the thinking person's way of running *Perfect Writer*, though other methods are in use. You are looking at the B> prompt and want to start editing MYFILE.MSS. Give the command:

PW MYFILE.MSS

or, if you are foolishly not using *PluPerfect*'s CP/M 2.2e or the public domain ZCPR, which automatically look on the A: drive when they can't find what they want on B:, give the command:

A:PW MYFILE.MSS

If, in defiance of sound sense, you are logged on to A: you will have to use

PW B:MYFILE.MSS

The operating system responds to commands such as these by loading *Perfect Writer* into the computer, and this in turn loads MYFILE.MSS, and you are ready to go. If it turns out that MYFILE.MSS wasn't what you wanted after all, then use the 'Find File' command from within *Perfect Writer*:

<CTL>-X <CTL>-F NEWFILE.MSS

If the name of your NEWFILE (before the period) is the same as that of the original MYFILE, then there will be some complaint about the buffer already being in use; just give a new buffer name; I usually use 'z'.

When after editing you leave *Perfect Writer* with a

<CTL>-X <CTL>-C

MENU.COM will not be on the A: drive when *Perfect Writer* looks for it, and so you will be returned directly to CP/M without any intrusive interrogation or delay.

Formatting:

Now you use *Perfect Formatter*, PF. The basic strategy is the same; to the B> prompt give the command:

PF MYFILE.MSS

Actually, you can drop the 'MSS' since *Perfect Formatter* supplies that by default. If you want a different extension then you will have to include it in your command. (This is one reason for using the extension 'MSS' for *all* your *Perfect Writer* files.) If the extension for your file is blank then, to prevent *Perfect Formatter* from mindlessly adding 'MSS', put a period after MYFILE. WARNING: Be careful to get the file name right; *Perfect Formatter* will hang if given the name of a nonexistent file, and you will have to cold-boot.

This command will cause *Perfect Formatter* to be loaded, and it will go to work formatting MYFILE.MSS using the default device recorded in the file PF.DAT or the device named at the top of MYFILE.MSS, and putting the result into MYFILE.FIN. If you want *Perfect Formatter* to do something other than this you add optional supplements to the command with which you call it. These supplements always begin with a hyphen and are separated from preceding items by a space. You enter the command and supplements all together as one big command.

The supplements available are:

-DEV DEVICENAME
This causes the formatting to be done with a different device.

-C Formats to the console.

-L Sends output to the printer (L for List).

-O FILENAME
(Capital O, not a zero.) This lets you send the output to a different file. The extension FIN is added automatically; to avoid that give an extension of your own.

-P Pause for insertion of sheets when formatting to the printer.

-V Causes VERBATIM to be the top level environment.

So, for example, to format MYFILE.MSS with the device DAISY126, give the following command to the B> prompt:

PF MYFILE -DEV DAISY126

Printing:

For printing you use *Perfect Printer*, PP, which works essentially the same way. To the B> prompt you give the command:

PP MYFILE

The FIN is added automatically. There are optional supplements, as follows:

-Q Quiet; that is, *Perfect Printer* goes right to work without pausing to ask if you really want the job done.

-PAUSE Pauses for insertion of single sheets.

-PORT PORTNAME
For printing through a different port, which I would no doubt understand better if I had a clearer notion what ports are, and how they are named.

-PAGE *n* Start printing on page *n*.

Thus, the command to the B> prompt:

PP MYFILE -PAGE 3 -PAUSE -Q

would print MYFILE.FIN starting with page 5, pausing for insertion of single sheets, and without any hesitation.
[R.W.B. 1985 7 3]

KEEPING PW EDIT FILES SHORT

Perfect Writer can handle files up to the size of the SWP file, which is normally 64 k. If you are using the *PluPerfect* version there is a configuration program available, PWCONFIG.COM, which lets you redefine the length of the SWP file and make it even bigger, as big as you can squeeze on the disk. But it is generally not a good idea to try to use all this space. As your text file gets bigger *Perfect Writer*'s operations become slower and slower; it takes forever to load the file and the constant swapping becomes a real nuisance. The solution is to work with short files during most writing and editing and then to assemble them just before printing. Short here means 15 or 20 k.

There are two ways to do the final assembly. The first is to produce a large MSS file, which means that you can still do some editing but are limited by the SWP file size. The second is to go directly from the small MSS files to a large FIN file using the @INCLUDE command.

To make a big MSS file out of a number of little ones you start with the first one and then insert the others into it. The easiest way to do this is to use the Insert File command, a very useful command which for some reason is not mentioned in the *Perfect Writer* manual. You locate the cursor at the point where you want the new file to come in and then type

<CNTRL>-X I

You are asked for the name of the file to be inserted and, after you give it and hit

the RETURN, *Perfect Writer* finds the file and copies it into the file you are working on.

There is, by the way, a matching command for writing a region of your file to a separate file on the disk. You mark the region and then hit

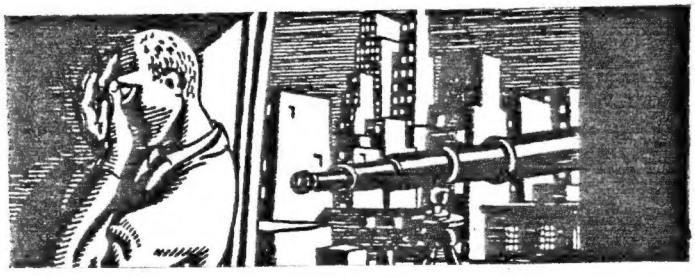
<CNTRL>-X R

and are asked to give the file name. Then a new file containing just the marked region is created on the disk.

It is usually better, though, not to make a big MSS file but to use @INCLUDE commands and to do the assembling into a big file during the formatting process. You can chain files together by having each short file but the last end with an @INCLUDE command for the next file. Or, my choice, you can have a master file containing nothing but @STYLE() commands for the whole document, instructions about page headings and footings and then a series of @INCLUDE commands. For example,

```
@STYLE(LEFTMARGIN 2Ø mm, LINEWIDTH 175 mm,
JUSTIFICATION no, LEVELHANG yes)
@PAGEHEADING[RIGHT="Page @REF<PAGE>"]
@PAGEFOOTING[]
@INCLUDE(PART-1.MSS)
@INCLUDE(PART-2.MSS)
@INCLUDE(PART-3.MSS)
```

As ordinarily run, *Perfect Formatter* puts the FIN file on the same disk as the one containing the MSS file or files, so if you are into something really big you may run into the disk limits. A way to postpone that encounter is to make a special formatting disk containing just PF.COM, PF.DAT and a lot of empty space to hold the FIN file. Put the FIN file on that drive when you format, using the -O option in the PF command. That will allow you a FIN file of 152 k, which should be large enough for most decent purposes.



DISTANCE UNITS IN PF FORMATTING

Perfect Formatter can deal with more units for distance than are mentioned in the manual. You discover this if you examine PF.COM with a disk utility, such as *Superzap*. In sector 39 hex of the file you find a list of unit names, in both singular and plural forms, and *Perfect Formatter* seems to deal appropriately with them all. The list is:

> in inch inches cm mm point points pica picas em ems char chars character characters line lines micas

All of these can be used in the @STYLE commands where a distance is called for. I find 'mm' particularly useful in specifying margins and linewidths; finer grained than 'inches' but not so picky as 'micas', and, unlike 'char' and 'line', invariant with respect to formatting device.
[R.W.B. 1985 7 4]

TECHTYPE

We have recently acquired the program *TECHTYPE*, a text formatting program designed for technical writing. In many ways it is more primitive than *Perfect Formatter*, but it is good for formatting mathematical equations and the like. It is meant for a daisywheel printer, and will do multi-pass printing allowing you to change print wheels between passes. To get italics, for example, it prints the page once with the regular text leaving holes where the italics are to go. Then it shoots the paper back to the top, ask you to change to the italic print wheel and, when you tell it you have done so, it runs the paper through again filling in the italics. This works best when you use single sheets, legal size.


```
*****************************************
**                Sophware             **
**                                     **
** No. 1                 1985 7 29     **
**                                     **
** R. W. Binkley              679-2149 **
** Department of Philosophy   679-3451 **
** Talbot College, U.W.O.              **
*****************************************
```